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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/891,033	06/25/2001	Howard H. Liebermann	30-4698US/11872-026001	9448

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05/04/2004

Roger H Criss
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EXAMINER

WYSZOMIERSKI, GEORGE P

ART UNIT

PAPER NUMBER

1742

DATE MAILED: 05/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/891,033

Applicant(s)

ORLOFF ET AL.

Examiner

George P Wyszomierski

Art Unit

1742

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20040205.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 and 11-19 is/are pending in the application.
- 4a) Of the above claim(s) 14-19 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 and 11-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 1742

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-4 and 6-9 are rejected under 35 U.S.C. 103(a) as obvious over Narasimhan (U.S. Patent 4,332,848).

Narasimhan discloses glassy metal strips having a composition within the limitations of instant claim 4 and which contain a repeating geometrical pattern of structurally defined protuberances and/or indentations. The preferred depth in Narasimhan is as much as 10 times the thickness of the strip; see Narasimhan column 7, line 60. This same paragraph of Narasimhan defines a structure consistent with the presently claimed "selected shape or configuration distending". With regard to the newly recited "permanently deformed" limitation, the examiner's position is that whatever amount of deformation present in the Narasimhan materials, such as the protuberances and indentations therein, meets the presently claimed limitation. With respect to claims 6-9, the examiner's position is that the suitability of a material for abrasive or cutting purposes is directly related to its composition, shape, and relative hardness to the material being abraded or cut. Because all of these parameters are the same in the prior art or the claimed invention, the examiner's position is that the claimed limitations are inherent in the Narasimhan material.

Narasimhan does not state that the prior art material is "previously cast", that it was subjected to "application of selected forces imparted by a set of stamping dies having mating surfaces", and does not specify the negative limitation of "without strip embrittlement [sic] or

crystallization". These differences are not seen as resulting in a patentable distinction between the prior art and the claimed invention because:

a) The limitations regarding previously cast material and application of forces imply a difference in the process by which the claimed products are made, as opposed to any difference between the actual claimed products and those of Narasimhan. It is well settled that a product-by-process claim defines a product, and that when the prior art discloses a product substantially the same as that being claimed, differing only in the manner by which it is made, the burden falls to applicant to show that any process steps associated therewith result in a product materially different from that disclosed in the prior art. See *In re Brown* (173 USPQ 685) and *In re Fessman* (180 USPQ 524). In the present case, Applicant has not met this burden, and the claimed products are held to be at best obvious variants of those disclosed by Narasimhan.

b) With regard to a material without strip embrittlement, no specific amount of this embrittlement is either defined or excluded by the instant claims, and whatever amount may or may not be present in the Narasimhan materials would fall within the presently claimed limitations. As to crystallization, the Narasimhan disclosure is drawn to the production of glassy or amorphous materials. It is thus a reasonable assumption that the prior art materials lack any substantial amount of crystallization.

Consequently, a prima facie case of obviousness is established between the disclosure of Narasimhan and the invention as presently claimed.

3. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Narasimhan in view of Watanabe et al. (U.S. Patent 5,622,768) or Sato et al. (U.S. Patent 4,865,664).

The Narasimhan products do not appear to contain element "Z" as defined in instant claim 5. The Watanabe and Sato et al. patents indicate that it is conventional in the art to include element "Z" in amorphous alloy strip compositions, in the amounts as defined in the instant claim. Consequently, the Watanabe or Sato disclosures would have motivated one of ordinary skill in the art to produce the Narasimhan products containing an amount of element "Z" as defined in the present claims.

4. Claims 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Narasimhan in view of either Watanabe et al. or Bruckner (U.S. Patent 4,853,292).

The Narasimhan patent does not discuss a plurality of stacked materials or transformer cores, as required by the instant claims. Both Watanabe and Bruckner indicate it to be conventional in the art to form laminated magnetic cores by using a plurality of layers of amorphous metal alloys. These disclosures would have motivated one of ordinary skill in the art to form the materials disclosed by Narasimhan into the configurations as set forth by Watanabe or Bruckner.

5. In a response filed February 5, 2004, Applicant alleges that the claimed permanently deformed material is distinct from that of the prior art, that certain shapes which would fall within the limitations of the instant claims cannot be produced by the methods as disclosed in the prior art, that the present invention involves "structurally relaxed" materials in contrast to those of the prior art, that certain features such as shear bands are present in the claimed material in contrast to the prior art, and/or that certain magnetic properties of the claimed material are distinct from those of the prior art. Applicant's arguments have been carefully considered, but are not persuasive of patentability because:

a) It is not clear what would or would not be encompassed by the term "permanently deformed". Given a sufficient amount of force, any material, whether that of Narasimhan or that of Applicant, could be deformed to some degree. Thus, the statement that the claimed product is "permanently deformed" would not distinguish it from the product of Narasimhan, i.e. in either instance one could introduce further deformation to the respective materials should one choose to do so.

b) Pages 12-13 of Applicant's response suggest that the Narasimhan disclosure would be somewhat limited as to what shapes of materials would be produced in the prior art. Even if correct, Applicant has not shown that shapes within the limitations of the instant claims would not be within the disclosure of Narasimhan.

c) With regard to a structurally relaxed material, no such limitation is stated or implied by any of the instant claims.

d) With respect to shear bands, none of the instant claims require shear bands to be present. Further, nothing in Applicant's response shows any particular difference between any amount of shear bands in the claimed material versus those of the prior art, i.e. Applicant's position has been by way of argument alone and no direct comparison has been made between a material of Narasimhan and that of the invention, either with respect to shear bands or to any other physical feature or property.

e) None of the instant claims limit the claimed article to those possessing any particular value for any magnetic property. Even if such a property were claimed, no distinction has been shown between any such property and a comparable value for such property in the prior art.

6. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


Art Unit: 1742

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to George Wyszomierski whose telephone number is (571) 272-1252. The examiner can normally be reached on Monday thru Friday from 8:00 a.m. to 4:30 p.m. Eastern time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King, can be reached on (571) 272-1244. Effective October 1, 2003, all patent application related correspondence transmitted by facsimile must be directed to the central facsimile number, (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


GEORGE WYSZOMIERSKI
PRIMARY EXAMINER

GPW
April 30, 2004